

REMARKS

Claims 1-3, 5, 7, 9, 18-20, 22-25, and 27-31 are now pending in the application. Claims 1-3, 5, 7, 9, 18-20, and 22 have been amended. Claims 28-31 are new. The amended claims and new claims are fully supported by the application as filed, and do not present new subject matter. Applicant respectfully requests reconsideration and withdrawal of the rejections in view of the amendments and remarks contained herein.

TELEPHONIC INTERVIEW SUMMARY

Applicant's representative, Brent G. Seitz, thanks Examiner Hinze for the courtesies extended during the telephonic interviews of December 9 and 28, 2010. During the interviews, differences between Applicant's invention and the cited art were discussed. The Examiner agreed that further defining the position of the transferred transfer layer, the printing, and the embossing (or pattern with elevations/indentations) to recite that they overlap and are positioned in vertical alignment with respect to the base layer, will overcome the current rejections. The Examiner further stated that additional search and consideration will be required. Applicant has amended independent Claims 1, 18, and 19 accordingly, as further explained herein, and thus respectfully requests reconsideration and withdrawal of the current rejections of Claims 1, 18, and 19, as well as those claims dependent therefrom.

REJECTION UNDER 35 U.S.C. § 112

Claims 1-3, 5, 7, 9, 10, and 23-26 stand rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter that Applicant regards as the invention. This rejection is respectfully traversed.

Applicant has amended Claim 1 to address the concerns set forth in the Office Action. In particular, amended Claim 1 no longer recites “arbitrarily,” “actively drying...after the color printing and before the coating,” or “actively drying...after the coating and before the color printing.” In view of the amendments to independent Claim 1, the Section 112 rejection of dependent Claims 2, 3, 5, 7, 9, 10, and 23-26 is also overcome. Applicant thus respectfully requests reconsideration and withdrawal of the Section 112 rejection of independent Claim 1 and those claims dependent therefrom.

REJECTION UNDER 35 U.S.C. § 103

Claims 1-3, 5, 9, 10, 18-20, and 22-27 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Lappe et al. (U.S. Pat. No. 5,565,054) in view of Vaughn et al. (U.S. Pat. No. 6,983,686) and Gross et al. (U.S. Pat. No. 5,603,259). Claim 7 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Lappe in view of Vaughn and Gross, and further in view of Miyamoto (U.S. Pat. No. 6,033,509). These rejections are respectfully traversed.

Amended independent Claim 1 recites, in part, “wherein at each predetermined position on the substrate the transferred portion of the transfer layer, the color printing,

and the embossing overlap and are positioned in stacked vertical alignment with respect to the base material.”

Amended independent Claim 18 recites, in part, “wherein at each predetermined position the adhesive, the transfer layer, the print, and the embossing are in overlapping, vertical alignment with respect to the base layer.”

Amended independent Claim 19 recites, in part, “to provide the adhesive, the transfer film, the pattern, and the print material in overlapping vertical alignment on the base printing material at each of the predetermined portions.”

The Lappe et al. reference appears to disclose a method and device for film transfer only. Lappe fails to disclose or suggest embossing, a pattern with elevations/indentations, or printing, as generally set forth in amended independent Claims 1, 18, and 19. Contrary to the Office Action’s assertion at page 4, paragraph 6(a), Lappe fails to disclose or suggest printing. The portions of Lappe cited by the Office Action for this feature are directed to the use of a color printing device for applying the adhesive for the transfer film. Lappe fails to disclose or suggest use of the color printing device for color printing, or printing at all, *as agreed by the Examiner during the telephonic interview*. Lappe also teaches that it is desirable to eliminate active heating or drying to reduce energy costs at col. 3, lines 53-55, which recite: “Since a heating of the printing surfaces during the transfer film application is no longer required, the inventive method furthermore operates at substantially reduced energy costs.” While this passage is directed to heating during the transfer film application, as the Examiner pointed out during the interview, Lappe nevertheless teaches away from

heating and the active drying set forth in independent Claims 1, 18, and 19 to reduce energy costs.

The Vaughn reference appears to disclose a device for providing a substrate with embossed images 20 spaced apart from printed images 30. Vaughn fails to disclose or suggest applying a transfer film to the substrate, active drying, or vertically aligning a transfer film, an embossing (or a pattern with elevations or indentations), and a printing vertically on a substrate, as generally set forth in amended independent Claims 1, 18, and 19. Vaughn in fact teaches away from active drying because the embossing and printing are spaced apart, thus eliminating the need for active drying. Also, the embossed images of Vaughn provide an uneven surface to which it would be impossible to secure a transfer layer.

Vaughn's teachings are limited to a continuous stretchable substrate (see col. 2, line 52; col. 3, lines 19-26). Such a stretchable substrate cannot maintain embossed elevations and/or indentations as claimed because it has a spring force that will remove the structure. The substrate will therefore remain continuously flat throughout the method disclosed in Vaughn. This is supported by the fact that Vaughn does not disclose embossing that provides elevations or indentations, but only a "disruption" of the structure of the substrate (col. 5, lines 8-12), which remains flat. This is why embossing can take place before printing (Figure 1). Otherwise, the use of rollers (ref no. 31, 32) would destroy the elevations or indentations, or hinder ink printing because of a required gap between the rollers.

The Gross reference appears to disclose a heat tunnel after each of the first printing station 14, the intermediate printing station 16, and the last printing station 18. The heat

tunnels dry the ink applied at the first two printing stations and the adhesive applied at the last station. A roll leaf 90 is applied to the adhesive at roll leaf transfer station 24. After exiting the transfer station 24, “[t]he adhesive curing process, which was initiated at the heating station 20, now continues on each piece under ambient conditions.” See col. 5, lines 26-34 (emphasis added). The Office Action asserts that in view of Gross “[i]t would have been obvious...to modify Lappe to include a heat tunnel after each printing step and after the adhesive application step....” See Office Action at p. 5. But Gross fails to disclose or suggest, and in fact teaches away from, drying the adhesive after the roll leaf 90 is transferred. Gross thus teaches away from drying after application of the claimed transfer film.

Gross only discloses processing a flat web, and thus fails to disclose or suggest embossing or a structure including elevations and/or indentations, as generally set forth in independent Claims 1, 18, and 19. For example, the foil transfer process of Gross does not allow the web to have embossed elevations and/or indentations because the transfer station (ref. no. 24) does not have a gap allowing an elevation or indentation to pass through the rollers (ref. nos. 92, 94). With reference to Figure 2, Gross illustrates that direct contact is necessary between the adhesive of the web and the metallic layer to transfer the metallic layer. Thus, embossing a substrate or providing a substrate with a structure having elevations or indentations as set forth in Claims 1, 18, and 19 would not have been obvious in view of Gross.

The Lappe, Vaughn, and Gross references each fail to disclose or alone suggest a transfer layer, a printing, and an embossing (or structure with elevations or indentations) in vertical alignment on a substrate, as generally set forth in amended independent Claims 1,

18, and 19. Therefore, combination of the references fails to render these claims obvious – as agreed by the Examiner during the telephonic interviews. Applicant respectfully requests reconsideration and withdrawal of the Section 103 rejections of Claims 1, 18, and 19, as well as those claims dependent therefrom.

NEW CLAIMS

New Claims 28-31 have been added. The new claims are supported by the application as filed, and do not present new subject matter. For example, new dependent Claim 28 is supported by at least Figures 1 and 2 and paragraphs [0054] and [0058] of Applicant's published application. New dependent Claims 29-31 are supported throughout the specification as filed, such as at least Figure 6. Applicant respectfully requests entry and consideration of the new claims.

The new claims are also not anticipated by, or obvious in view of, the art of record. For example, new claims 29-31 generally recite that the transfer layer, the printing, and the embossing (or pattern formed by the stamping device) have the same design pattern. As agreed by the Examiner during the telephonic interview, the current art of record fails to disclose or suggest these features. Applicant thus respectfully requests consideration and allowance of new Claims 28-31.

CONCLUSION

It is believed that all of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicant therefore respectfully requests that the Examiner reconsider and withdraw all presently outstanding rejections. It is

believed that a full and complete response has been made to the outstanding Office Action and the present application is in condition for allowance. Thus, prompt and favorable consideration of this amendment is respectfully requested. If the Examiner believes that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at (248) 641-1600.

Respectfully submitted,

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